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Sellars and the Myth of the Given

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Sellars, Wilfrid. "Empiricism and the Philosophy of Mind," in *Minnesota Studies in the Philosophy of Science*, vol. I, edited by Herbert Feigl and Michael Scriven, 253–329. Minneapolis: University of Minnesota Press, 1956. (EPM) Reprinted with additional footnotes in *Science, Perception and Reality*. London: Routledge & Kegan Paul, 1963; reissued by Ridgeview Publishing Company in 1991. (SPR) Published separately as *Empiricism and the Philosophy of Mind: With an Introduction by Richard Rorty and a Study Guide by Robert Brandom*, edited by Robert Brandom. Cambridge, MA: Harvard University Press, 1997. Also reprinted in W. deVries and T. Triplett, *Knowledge, Mind, and the Given: A Reading of Sellars' "Empiricism and the Philosophy of Mind."* Cambridge, MA: Hackett, 2000. (KMG)

Alston, William P. "What's Wrong With Immediate Knowledge?" *Synthese* 55 (1983): 73–96. Reprinted in *Epistemic Justification: Essays in the Theory of Knowledge*. Ithaca, NY: Cornell University Press, 1989.

_____. "Sellars and the 'Myth of the Given'," 1998. <http://www.ditext.com/alston/alston2.html> (accessed July 27, 2010).

Meyers, R. G. "Sellars' Rejection of Foundations." *Philosophical Studies* 39 (1981): 61–78.

Knowledge has a structure: there are relations of dependency among a person's (and a community's) cognitive states. Skeptical challenges easily arise; for example, if every piece of knowledge is dependent on others, how could we acquire our first piece of knowledge (#38)? Many philosophers have held that knowledge has a hierarchical structure not unlike that of a well-built house. There must be some cognitive states that are in direct contact with reality, and that form a firm foundation that supports the rest of our knowledge. For obvious reasons, this has been called the "foundationalist picture" of knowledge's structure. Philosophers cash this metaphor out via two requirements on knowledge, as follows. (1) There must be cognitive states that are basic in the sense that they possess some positive epistemic status independently of their epistemic relations to any other cognitive states. Call this the Epistemic Independence Requirement [EIR]. Positive epistemic statuses include being an instance of knowledge, being justified or warranted, or (more weakly) having some presumption in its favor. (Many have claimed that basic cognitions must possess an *unassailable* epistemic warrant – certainty, incorrigibility, or even infallibility.) Epistemic relations include deductive and inductive implication. (2) Every nonbasic cognitive state with positive epistemic status possesses that status only because of the epistemic relations it bears, directly or indirectly, to basic cognitive states. Thus the basic states provide the ultimate support for the rest of our knowledge. Call this the Epistemic Efficacy Requirement [EER]. Call such basic – that is, independent and efficacious – cognitive states the "given." Many philosophers have believed that there has to be such a given if there is to be any knowledge at all.

The EIR and the EER together put constraints on what could play the role of basic knowledge. Traditionally, philosophers required that basic knowledge have an unassailable warrant. Although Sellars was a fallibilist and believed that any cognitive state could be challenged, his argument against the given, contrary to some interpretations, does not worry about this issue. If there are no foundations, we need not worry about the strength of foundational warrant.

A foundationalist structure has been attributed to logical and mathematical knowledge, which is formal and *a priori*, as well as to empirical knowledge. For millennia, Euclidean geometry, which starts with definitions and axioms and derives numerous theorems by long chains of reasoning, has provided a paradigmatic foundationalist structure. But no axioms – self-evident general truths – seem adequate to provide the basis for empirical knowledge. Rather, the common assumption is that particular truths can be known through direct experience and provide the basis for all empirical knowledge. Thus, experience supposedly provides us with epistemically independent and efficacious cognitive states that form the foundation of

empirical knowledge. Empiricism claims that all substantive knowledge rests on experience.

Sellars' argument against the given denies not only that there must be a given but that there can be a given in the sense defined. It is thus an attack on the foundationalist picture of knowledge, especially its empiricist version. The argument claims that nothing can satisfy both EIR and EER. To satisfy EER, a basic cognition must be capable of participating in inferential relations with other cognitions; it must possess propositional form and be truth-evaluable. To meet EIR, such a propositionally structured cognition must possess its epistemic status independently of inferential connections to other cognitions. No cognitive states satisfy both requirements.

Many philosophers have believed in self-evident cognitive states that are epistemically independent. Mathematical axioms were traditionally called self-evident, but is any empirical proposition self-evident? According to Sellars, the standard candidates for basic empirical knowledge (knowledge of sense-data, knowledge of appearances, etc.) all presuppose other knowledge on the part of the knower and thus fail EIR. He argues that such states count as cognitive states only because of their epistemic relations to other cognitive states. Because he argues by cases, it is unclear whether some other candidates might pass EIR. For instance, some claim that externalism evades his critique because then the epistemic status of basic cognitive states is determined solely by their causal status and they pass EIR (see Meyers). Just assuming that there are (much less must be) Epistemically Independent cognitive states, however, begs the question against his argument. A final resolution of this dispute requires a positive theory of the sufficient conditions for possessing a positive epistemic status (see Alston). Sellars offers one, but this reaches beyond the critique of the given. At very least, Sellars' critique of the given shifts the burden of proof onto those who believe in epistemically independent cognitive states. They owe us a good theory of such states and why they have their epistemic status.

Some foundationalists believe that basic cognitive states are not propositionally structured but are cases of direct knowledge of an object – what Russell called “knowledge by acquaintance.” Such states violate EER: How could such knowledge justify further knowledge? If John knows O, for some object O, no proposition seems to be warranted for John solely on that basis.

If Sellars' argument works, knowledge cannot be acquired incrementally from initial encounters with the world in experience that are already full-fledged cognitive states. The epistemic status of our perceptions and introspections belongs to them because they belong in a complex system of mutually supporting cognitive states that mediate our practical engagement with the world around us – though Sellars also rejects standard coherentism as well. The argument is not a conclusive, once-and-for-all refutation of the

foundationalist picture of knowledge, but it is a significant challenge to that picture. Sellars' argument, in combination with arguments by Quine and Davidson, among others, have put foundationalism on the defensive since, roughly, the mid-point of the twentieth century.

Sellars' argument has influenced a wide range of late-twentieth-century philosophers, including Richard Rorty, Paul and Patricia Churchland, Laurence Bonjour, David Rosenthal, Jay Rosenberg, John McDowell, and Robert Brandom.

If I reject the framework of traditional empiricism, it is not because I want to say that empirical knowledge has no foundation. For to put it this way is to suggest that it is really "empirical knowledge so-called," and to put it in a box with rumors and hoaxes. There is clearly some point to the picture of human knowledge as resting on a level of propositions – observation reports – which do not rest on other propositions in the same way as other propositions rest on them. On the other hand, I do wish to insist that the metaphor of "foundation" is misleading in that it keeps us from seeing that if there is a logical dimension in which other empirical propositions rest on observation reports, there is another logical dimension in which the latter rest on the former.

Above all, the picture is misleading because of its static character. One seems forced to choose between the picture of an elephant which rests on a tortoise (What supports the tortoise?) and the picture of a great Hegelian serpent of knowledge with its tail in its mouth (Where does it begin?). Neither will do. For empirical knowledge, like its sophisticated extension, science, is rational, not because it has a foundation but because it is a self-correcting enterprise which can put any claim in jeopardy, though not all at once. (EPM VIII, §38, in SPR, 170; in KMG, 250)

The doctrine of the given requires that for any empirical knowledge P, some epistemically independent knowledge G is epistemically efficacious with respect to P.

- P1. If X cannot serve as a reason for Y, then X cannot be epistemically efficacious with respect to Y.
- P2. If X cannot serve as a premise in an argument for Y, then X cannot serve as a reason for Y.
- P3. If X is nonpropositional, then X cannot serve as a premise in an argument.
- P4. If X is nonpropositional, then X cannot serve as a reason for Y (hypothetical syllogism, P3, P2).
 - C1. If X is nonpropositional, then X cannot be epistemically efficacious with respect to Y (hypothetical syllogism, P1, P4).
- P5. If X cannot be epistemically efficacious with respect to Y, then the nonpropositional cannot serve as the given.

- C2. The nonpropositional cannot serve as the given (*modus ponens*, C1, P5).
- P6. No inferentially acquired, propositionally structured mental state is epistemically independent.
- P7. The epistemic status of noninferentially acquired, propositionally structured cognitive states presupposes the possession by the knowing subject of other empirical knowledge, both of particulars and of general empirical truths.
- P8. If noninferentially acquired empirical knowledge presupposes the possession by the knowing subject of other empirical knowledge, then noninferentially acquired, propositionally structured cognitive states are not epistemically independent.
- C3. Noninferentially acquired, propositionally structured cognitive states are not epistemically independent (*modus ponens*, P7, P8).
- P8. Any empirical, propositional cognition is acquired either inferentially or noninferentially.
- C4. Propositionally structured cognitions, whether inferentially or noninferentially acquired, are never epistemically independent and cannot serve as the given (conjunction, P6, C3).
- P9. Every cognition is either propositionally structured or not.
- C5. Neither propositional or nonpropositional cognitions can serve as the given (conjunction, C2, C4).
- P10. If neither propositional nor nonpropositional cognitions can serve as the given, then it is reasonable to believe that no item of empirical knowledge can serve the function of a given.
- C6. It is reasonable to believe that no item of empirical knowledge can serve the function of a given (*modus ponens*, C5, P10).

Gettier's Argument against the Traditional Account of Knowledge

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Gettier, Edmund. "Is Justified True Belief Knowledge?" *Analysis* 23 (1963): 121–3.

The Gettier problem has drawn the attention of epistemologists since Edmund Gettier (1927–) published his three-page article in 1963. The point of Gettier's argument is to show that the concept of knowledge cannot be defined as justified true belief, and Gettier set out to disprove the traditional account of knowledge by showing that there are counterexamples to it. If the traditional account of knowledge is correct, then it is not possible for a person to have a justified true belief that isn't knowledge (P1). Since the account maintains that all instances of knowledge are justified true beliefs and vice versa, in order to refute the traditional account, Gettier needed to provide an example of a justified true belief that no one would think is an example of knowledge.

In order to understand Gettier's counterexample, it is first important to see how advocates of the traditional account understood justified belief. The correct analysis of justification is a matter of great controversy, but as a preliminary attempt it may be helpful to think of a person's having a justified belief as that person's having some evidence or good reasons to think that the belief is true or likely to be true. Importantly, to have a justi-

¹ The author wishes to thank Michael O'Rourke (University of Idaho).

fied belief, one's good reasons do not necessarily need to guarantee that the belief is true. For example, one may be justified in believing that one is seeing a zebra based on the evidence of a black-and-white-striped-equine sensory experience, and one would still be justified, in believing one is seeing a zebra, even if the animal were not a zebra but a cleverly painted mule instead. Consequently, for a belief to be justified, it is not necessary for the belief to be true. As (P2) states, it is possible for one to be justified in believing a false proposition.

The next part of Gettier's counterexample follows from the principle expressed by (P3): if one is justified in believing some proposition, then one is justified (at least to the same degree) in believing any proposition that one competently deduces from the original one. Since when deductive reasoning is performed competently it preserves truth infallibly, one's justification does not diminish across deductive inference. Perhaps this is best illustrated by a variation from one of Gettier's examples. Imagine a case where a trustworthy friend, Mr. Nogot, provides sufficiently strong evidence to his friend Jackson for being justified in believing that he (Nogot) owns a Ford. For example, imagine that in addition to his typically trustworthy testimony, Mr. Nogot shows Jackson his registration papers, he takes Jackson for a ride in the Ford, and Jackson has no reason to doubt his testimony or any of the additional evidence that he has to support the proposition that Mr. Nogot owns a Ford. Now, Mr. Nogot does not own a Ford (unbeknownst to Jackson), but this does not prevent Jackson from being justified in believing that Mr. Nogot owns a Ford, since according to (P2) it is possible for a person to be justified in believing a false proposition. And now to the part relevant to (P3) – suppose that as Jackson is pondering his justified belief (that Mr. Nogot owns a Ford) with Mr. Nogot in the room, he deductively reasons that if Mr. Nogot owns a Ford, then someone in the room owns a Ford; therefore, Jackson concludes, someone in the room owns a Ford. On the basis of (P3), Jackson is at least as justified in believing that someone in the room owns a Ford as he is for the proposition that Mr. Nogot owns a Ford since he deduced the former from the latter, which is stated in (C1).

The final claim needed to underwrite Gettier's counterexample is stated in (P4): If a person is justified in believing a proposition that is true by accident or luck, then her justified true belief is not knowledge. It has already been stipulated that Mr. Nogot does not own a Ford. Now let's suppose that at the time that Jackson deductively reasons from the proposition that Mr. Nogot owns a Ford to the proposition that someone in the room owns a Ford, Mr. Havit happens to be the room. Mr. Havit – a person Jackson has never met or has any justification for believing what kind of car he owns – is sitting quietly in the corner of the room, and he happens to own a Ford. So, it turns out that Jackson's belief that someone in the

room owns a Ford is both justified and true. Recall that it is justified because he deduced it from a proposition that he is justified in believing. The belief is true since Mr. Havit owns a Ford and he is in the room. But since Jackson has no beliefs whatsoever about Mr. Havit, the truth of his justified belief appears to be accidental or lucky. After all, Jackson would have still believed that someone in the room owns a Ford even if Mr. Havit wasn't in the room. Thus, it seems that Jackson's justified belief is true by luck or accident. In other words, the belief's being true has nothing to do with the justification Jackson has for holding the belief. For this reason, it would be wrong to accept that Jackson's justified true belief (that someone in the room owns a Ford) counts as knowledge.

Since Jackson's belief that someone in the room owns a Ford is a justified true belief (C2), and it is plainly wrong to think that it counts as knowledge, Gettier's argument is widely accepted as demonstrating why knowledge cannot be defined as justified true belief (C3).

These [. . .] examples show that definition (a) [knowledge is justified true belief] does not state a sufficient condition for someone's knowing a given proposition. (Gettier, 123)

- P1. If knowledge is justified true belief, then it is not possible for a person to have a justified true belief that isn't knowledge.
- P2. A person can be justified in believing a false proposition.
- P3. If a person is justified in believing some proposition, then she is justified (at least to the same degree) in believing any proposition that she competently deduces from the original.
 - C1. A person is justified (at least to the same degree) in believing any proposition that she competently deduces from the original (*modus ponens*, P2, P3).
- P4. If a person is justified in believing a proposition that is true by accident or luck, then his justified true belief is not knowledge.
- P5. Jackson is justified in believing that someone in the room owns a Ford, which is true by accident or luck.
 - C2. It is possible for a person to have a justified true belief that isn't knowledge (*modus ponens*, P4, P5).
 - C3. It is not the case that knowledge is justified true belief (*modus tollens*, P1, C2).

The Bias Paradox

Deborah Heikes

Antony, Louise. "Quine as Feminist," in *A Mind of One's Own*, edited by Louise M. Antony and Charlotte Witt, 110–53. Boulder, CO: Westview, 2002.

Heikes, Deborah. "The Bias Paradox: Why It's Not Just for Feminists Anymore." *Synthese* 138, 3 (2004): 315–35.

The bias paradox arises from arguments that reject or decisively revise standard Cartesian conceptions of pure objectivity and impartiality. Such conceptions require that we move beyond particularity and contingency in order to acquire knowledge that is free from bias. Feminist philosophers are generally concerned with rejecting notions of objectivity that require this complete elimination of subjectivity. As a rule, feminists believe that subjectivity can never be entirely eliminated. However, this rejection of a notion of pure (nonsubjective) neutrality has led the dilemma that Louise Antony calls the "bias paradox."

For feminists, two fundamental commitments give rise to a dilemma that seems to require a commitment either to objectivism or relativism. The first of these commitments is the explicit rejection of the concept of impartial objectivity, and the second one is the desire to assert the reality and injustice of women's oppression. The problem is that in the absence of impartiality (at least as an ideal), there appears to be a lack of principled, normative criteria for evaluating beliefs across differing epistemic perspectives. At the same time, feminist philosophers almost unanimously reject the possibility of impartiality. The dilemma, as Antony presents it, is this: either we endorse the ideal of objectivity so that we can provide a ground for evaluating bias or we cease criticizing bias (i.e., we cease distinguishing between "good" biases and "bad" biases), since there can be no standard for evaluating competing biases.

While this tension is dealt with most straightforwardly in discussions of naturalized feminist epistemology and feminist philosophy of science, the bias paradox is not merely a problem for feminists. Any view that rejects the Cartesian ideals of pure objectivity and value-neutrality will ultimately be forced to confront the dilemma that seemingly results from the paradox, namely, either to endorse pure impartiality or to accept an “anything goes” relativism. The problem, of course, is that most philosophical views deny that pure impartiality can be achieved, and many argue that it is not even useful as an ideal. However, the alternative view is that just about every claim to knowledge is as good as any other claim, and almost no one wishes to adopt this view. Hence, we encounter the bias paradox.

According to many feminist philosophers, the flaw in the ideal of impartiality is supposed to be that the ideal itself is biased: Critics charge either that the concept of ‘objectivity’ serves to articulate a masculine or patriarchal viewpoint [...], or that it has the ideological function of protecting the rights of those in power, especially men. But how is it possible to criticize the partiality of the concept of objectivity without presupposing the very value under attack? Put baldly: If we don’t think it’s good to be impartial, then how can we object to men’s being *partial*? (Antony, 114)

- P1. Impartiality is untenable as an ideal of epistemic practice.
- P2. If impartiality is untenable as an ideal of epistemic practice, then all epistemic practices are biased.
 - C1. All epistemic practices are biased (*modus ponens*, P1, P2).
- P3. If all epistemic practices are biased, there can be no impartial criteria for evaluating the epistemic worth of biases.
 - C2. There can be no impartial criteria for evaluating the epistemic worth of biases (*modus ponens*, C1, P3).
- P4. If there are no impartial criteria for evaluating the epistemic worth of biases, then all biases are equal.
 - C3. All biases are equal (*modus ponens*, C2, P4).

Generic bias paradox:

- P1. The ideal of impartiality should be rejected.
- P2. If we reject the ideal of impartiality, there can be no justified procedure for normatively distinguishing among competing epistemic views.
 - C1. There can be no justified procedure for normatively distinguishing among competing epistemic views (*modus ponens*, P1, P2).
- P3. If there can be no justified procedure for normatively distinguishing among competing epistemic views, then all accounts are epistemically equal.
 - C2. All accounts are epistemically equal (*modus ponens*, C1, P3).

- P1. It is not rational to have religious belief without sufficient evidence if and only if having religious belief without sufficient evidence violates our duty to avoid false belief.
- P2. Having religious belief without sufficient evidence violates our duty to avoid false belief if and only if I could withhold religious belief for the purpose of waiting until I had sufficient evidence.
- C1. If it is not rational to have religious belief without sufficient evidence, then having religious belief without sufficient evidence violates our duty to avoid false belief (equivalence, simplification, P1).
- C2. If having religious belief without sufficient evidence violates our duty to avoid false belief, then I could withhold religious belief for the purpose of waiting until I had sufficient evidence (equivalence, simplification, P2).
- C3. If it is not rational to have religious belief without sufficient evidence, then I could withhold religious belief for the purpose of waiting until I had sufficient evidence (hypothetical syllogism, C1, C2).
- P3. Access to the evidence for religious belief requires already having religious belief.
- P4. If access to the evidence for religious belief requires already having religious belief, then I cannot withhold belief for the purpose of waiting until I had sufficient evidence.
- C4. I cannot withhold religious belief for the purpose of waiting until I had sufficient evidence (*modus ponens*, P3, P4).
- C5. It is rational to have religious belief without sufficient evidence (*modus tollens*, C3, C4).

Quine's Two Dogmas of Empiricism

Robert Sinclair

Quine, W. V. "Two Dogmas of Empiricism," in *From a Logical Point of View*, 20–46. Cambridge, MA: Harvard University Press, 1981. Originally published in *Philosophical Review* 60 (1951): 20–43.

Hylton, Peter. *Quine*. New York: Routledge, 2007.

Kemp, Gary. *Quine: A Guide for the Perplexed*. New York: Continuum, 2006.

Russell, Gillian. "The Analytic/Synthetic Distinction." *Philosophy Compass* 2 (2007): 712–29.

There appears to be an intuitive difference between these two claims:

- (1) All bachelors are unmarried.
- (2) All bachelors are less than 15 feet tall.

While both of these statements are true, the way in which they are taken to be true highlights what many philosophers have seen as a significant difference. The first is an "analytic" truth, whose truth is determined solely through the meanings of the terms involved and independently of any empirical fact. The second "synthetic" truth is true because of empirical facts about the world. In his famous and widely read article, "Two Dogmas of Empiricism," W. V. Quine declared that the use of this distinction in modern empiricism was an unsupported dogma, and he further argued that

what he calls “reductionism,” roughly, the view that theoretical statements can be logically reduced to statements about experience, is a second dogma that should also be rejected. These criticisms target the views of Rudolf Carnap, C. I. Lewis, and others who used analyticity to make sense of the *a priori* elements of human knowledge and, more specifically, advocated its importance in clarifying and understanding the language of science.

In “Two Dogmas,” Quine’s main concern is with clearly explicating the distinction in question, and he argues that there is no such sharp division between analytic truths and synthetic truths. His argument has been usefully described as analogous to the kind one might find offered in the physical sciences (Kemp, 19–20). A scientist might reject a type of physical phenomena because it cannot be explained in ways that do not already assume its existence. It might be further argued that the evidence cited in support of such phenomena can be accounted for in other ways without them. In general, it is this type of attitude that informs the structure of Quine’s overall argument, where he begins by surveying a number of attempts to explain the concept of analyticity and finds them all uninformative. Here, he appeals to what has been called the “circularity argument,” where analyticity is defined in terms of sameness of meaning or synonymy (Russell, 718).

Two expressions are synonymous when sentences containing them remain true when one is substituted for the other, what is here described as interchangeability *salva veritate*. When applied to necessity statements in English, this view seems to work, since the sentence ‘Necessarily, every unmarried man is unmarried’ and ‘Necessarily, every bachelor is unmarried’ is a case where truth is preserved when we switch ‘unmarried man’ for ‘bachelor,’ and these terms are also synonyms. The problem is that such sentences are understood as true in virtue of being analytic. The attempt to explain analyticity by an appeal to synonymy is then circular.

Quine criticizes the second dogma of reductionism by claiming that theoretical sentences have connections to experience only as a collective body and not when isolated from each other. This then prevents the type of phenomenalist reduction of science to experience advocated by the logical empiricists and further prevents us from defining synthetic statements as true when confirmed by sets of experience and analytic truths as those confirmed by any experience whatsoever. With each of these attempts to clarify analytic truth found wanting, Quine claims that the reasonable thing to conclude is that the distinction itself is an unempirical dogma. In the last section of his paper, he outlines his alternative view of empiricism, often described as “epistemological holism,” which is further developed in his later work. Here, he indicates how the alleged *a priori* necessity of mathematics and logic can be explained by its deep entrenchment within our overarching system of theoretical commitments rather than by an appeal to

analyticity. This deep entrenchment is what further explains our reluctance to revise such truths. Quine would come to emphasize that the main issue surrounding the analytic–synthetic distinction turns less on the availability of its sharp delineation (he later suggests and endorses his own way of marking the difference), but rather with its general epistemological significance. Here he claims that no such distinction is of any real import in helping us to understand the structure of human knowledge (Hylton, 68–80).

Many philosophers influenced by logical empiricism and its specific conception of scientific philosophy viewed some form of the analytic–synthetic distinction as central for making sense of *a priori* truth. After Quine's famous criticisms, it became increasingly difficult simply to assume that some form of this distinction was viable. This also led to a fundamental change in conceptions of philosophy and philosophical practice. Carnap's use of the analytic–synthetic distinction supported his view of philosophy as concerned with the logical structure of scientific language and as distinct from empirical science. Quine's criticisms of analyticity further challenged this view of philosophy by rejecting any sharp difference between philosophy and empirical science. The result was Quine's influential naturalistic view of philosophy, which conceives of philosophical pursuits as continuous with those found in the empirical sciences.

There have been many critical responses to Quine's circularity argument against analyticity, and there are various ongoing attempts to resurrect alternative conceptions of analyticity. It has been recently suggested that new innovations in the theory of meaning offer support for an account of analytic truth in terms of meaning (Russell, 712–29).

In formal and informal work alike, thus, we find that definition [. . .] hinges on prior relations of synonymy. Recognizing then that the notion of definition does not hold the key to synonymy and analyticity, let us look further into synonymy and say no more of definition [. . .] we must recognize that interchangeability *salva veritate*, if construed in relation to an extensional language, is not a sufficient condition of cognitive synonymy in the sense needed for deriving analyticity. [. . .] If a language contains an intensional adverb 'necessarily' [. . .] then interchangeability *salva veritate* in such a language does afford a sufficient condition of cognitive synonymy; but such a language is intelligible only in so far as the notion of analyticity is already understood in advance [. . .]. The dogma of reductionism, even in its attenuated form, is intimately connected with the other dogma – that there is a cleavage between the analytic and synthetic [. . .] the one dogma clearly supports the other in this way: as long as it is taken to be significant in general to speak of the confirmation and information of a statement, it seems significant to speak also of a limiting kind of statement which is vacuously confirmed, *ipso facto*, come what may; and such a statement is analytic [. . .].

My present suggestion is that it is nonsense, and the root of much nonsense, to speak of a linguistic component and a factual component in the truth of any individual statement. Taken collectively, science has its double dependence upon language and experience; but this duality is not significantly traceable into the statements of science taken one by one. (Quine 27, 31, 41–2)

- P1. Analytic truths are defined as true in virtue of the meaning of their terms and independently of empirical fact.
- P2. Meaning is not to be confused with reference (e.g., ‘creature with a heart’ and ‘creature with kidneys’ refers to the same class of objects, but the expressions differ in meaning).
- P3. There is no need to appeal to a special set of things called “meanings” to explain this difference, since the concept of meaning can be shown to be theoretically adequate if we focus on cases of sameness of meaning or synonymy (where we say that x and y are alike in meaning). If we proceed to use the concept of “meaning” to define analyticity, we should then appeal to synonymy between terms.
- C1. We can now define analytic truths as logical truths achieved by substituting synonyms for synonyms (‘No bachelor is married’ becomes the logical truth ‘No unmarried man is married’ if we substitute ‘unmarried man’ for ‘bachelor’) (*modus ponens*, P1, P3).
- P4. If truth-by-sameness of meaning (C1) relies on our understanding of truth-by-meaning, which in turn rests on a prior understanding of ‘meaning’, then this explanation of analyticity by use of synonymy is no clearer than our starting point.
- C2. This explanation of analyticity by use of synonymy is no clearer than our starting point (*modus ponens*, C1, P4).
- P5. What if we understand synonymy as involving the definition of terms?
- P6. If we understand synonymy as involving the definition of terms, then this only provides a report of which terms mean the same as others, but no further indication of what synonymy or sameness of meaning consists in.
- C3. Synonymy defined as definition is then no help in clarifying analyticity (*modus ponens*, P5, P6).
- P7. What if we take two phrases or expressions as synonymous when sentences containing them remain true when one is substituted for the other?
- P8. If we take two phrases or expressions as synonymous when sentences containing them remain true when one is substituted for the other, then in extensional languages, where substituting co-extensive expressions preserves truth-value, the interchangeability does not give us sameness of meaning (e.g., substituting ‘creature with a heart’ with ‘creature with kidneys’ preserves truth-value, but we would not claim that these expressions have the same meaning).

- C4. In extensional languages, interchangeability does not give us sameness of meaning and is no help in understanding analyticity (*modus ponens*, P7, P8).
- P9. However, English is not extensional and in such nonextensional languages, interchangeability *salva veritate* is the right criterion for synonymy; that is, it preserves sameness of meaning (e.g., 'Necessarily, every unmarried man is unmarried' and 'Necessarily, every bachelor is unmarried' is a case where truth value is preserved when we switch 'unmarried man' for 'bachelor', and they are also synonyms).
- P10. But necessity statements of this kind are thought to be true precisely because the statement in question ('every unmarried man is unmarried') is already taken to be analytic. In this way, interchangeability *salva veritate* provides the right account of synonymy, but only by already relying on the intelligibility of analyticity. This is circular, and so analytic truth is still not clarified.
- P11. If English is not extensional (P9), and necessity statements are taken to be analytic (P10), then this view of synonymy does not then explain analyticity.
- C5. This view of synonymy does not then explain analyticity (*modus ponens*, P11, conjunction, P9, P10).
- P11. Reductionism claims that any significant nonanalytic statement is equivalent to a statement about sensory experience. The meaning of a statement is then directly tied to a set of sensory experiences.
- P12. Given this view, we can define analytic truths as those statements confirmed by every experience or, in other words, as statements that contain no empirical content or information.
- P13. However, the reductionism project cannot be completed because of holistic considerations that prevent a simple reduction of theoretical sentences to specific sensory experiences.
- P14. But if reductionism is untenable, then we cannot assign specific empirical content to individual sentences or then specify when a sentence is analytic in the sense of being confirmed by any experience whatsoever.
- C6. There is then no way to use reductionism to clarify those statements which depend on sensory experience for their confirmation and those that do not, that is, analytic truths. Reductionism then fails to clarify the distinction between analytic and synthetic statements (*modus ponens*, P13, P14).
- C7. A consideration of these various proposals for clarifying analytic truths has shown them all to be wanting. We have no reason to hold such a firm distinction or the form of reductionism often used to support it. Both are dogmas of modern empiricism that should be rejected (conjunction, C2, C3, C4, C5, C6).

5

Pascal's Wager

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Pascal, Blaise. *Pensées*, translated by John Warrington. London: Dent, 1960.

Hacking, Ian. "The Logic of Pascal's Wager." *American Philosophical Quarterly* 9 (1972): 186–92.

McClennan, Edward F. "Pascal's Wager and Finite Decision Theory," in *Gambling on God*, edited by Jeff Jordan, 115–33. London: Rowman & Littlefield, 1994.

Whyte, Jamie. *Crimes against Logic*. New York: McGraw-Hill, 2004.

Unlike some other arguments about God's existence, Pascal's Wager doesn't try to prove that God exists. It is intended to show that you are better off believing that God exists and leading the life of a believer than not doing so. More particularly, it tries to show that it is worthwhile to believe in the existence of a Christian God and lead the life of a Christian believer.

The following is a modern presentation of Pascal's thinking. The Christian God either exists or does not. It is difficult to prove the existence of God by philosophical argument. Is it worthwhile for you to live a Christian life – acting as though you are a believer – in the hope of attaining eternal life and of becoming a believer in the process of living that life? If God exists and if you live the Christian life, you will be saved. This has nearly infinite value to you. If God exists and if you do not lead the Christian life, you will be damned, a result whose negative utility is also large. If God does not exist and if you live the Christian life, you lose at most a little worldly

pleasure compared to what you would get if God did exist. Hence the expected gain from living the Christian life is higher than that of living otherwise, so long as the probability of God's existence is greater than 0. It is foolish not to lead the Christian life.

Parts of the wager argument – whether in Pascal's own version or this modern one – are best presented using a device called a “decision table” (below). The words at the top of each column describe a possible state of the world or universe. There are just two, and each one has some chance or probability of being the truth. We can't eliminate either, according to Pascal. Each box tells the result you get if the state named in the column is true and you make the choice in the row. So, for example, the result for you if the Christian God exists and you lead the Christian life and believe this God exists is a gain or benefit of all – in Pascal's words – or infinite positive value – in the words of the modern argument – and a loss of either nothing – which seems to be what Pascal thinks – or something very small, some worldly pleasure – as the modern argument has it. Pascal doesn't explicitly tell us what goes into some of the boxes. For example, he doesn't say what the results for you are if the Christian God exists but you don't believe this. The modern statement of the wager fills this in for us.

The third and fourth premises of the argument below are implicit or hidden. This argument is certainly deductively valid once these hidden premises are added. Each simple step in the reasoning in the argument is truth-functionally valid. So any criticism of the argument must tell us that one or more of the premises are false. Here are some examples of criticisms:

- (a) The first premise says that anyone who leads the Christian life and believes, no matter why he does this, gets the benefit. That's what is in Table 1 and the first premise tells us that everything in the table is true. But it's false. The Christian God would not reward someone who believes or leads the life of a believer solely in order to gain the benefit of infinite happiness.
- (b) According to the reasoning, the table completely describes the possible states of the world and says what will result in each of these states if you do believe and lead an appropriate life or you don't believe and do not lead the Christian life. But is that correct? Suppose, when the Christian God doesn't exist, it is also true that another type of god does. This god punishes severely those who believe in the Christian God or lead a Christian life. This is a possibility; it is not ruled out by logic any more than the existence of the Christian God is ruled in or out by logic. If that happens, then what is said in Table 1 down column 2 aren't certain results. They are merely one among many possible sets of results. These are the results that would happen when the Christian

Table 1

	<i>Christian God exists (Prob > 0)</i>	<i>Christian God doesn't exist (Prob > 0)</i>
Lead Christian life and believe Christian God exists	Gain = all, infinite good; loss = small or nothing	Gain = nothing; loss = small or nothing
Don't lead Christian life and believe Christian God exists	Gain = nothing; loss = all, infinite bad	Gain = nothing; loss = nothing

God doesn't exist and no other god does either. What is said about the state when the Christian God doesn't exist also holds for when that God does exist. Other kinds of gods could possibly exist as well, even when the Christian God exists. The results listed in column 1 of the table are only the ones that happen when the Christian God exists and no other kind of god does. So either premise 1 is false because what the table states is that the results are really only one of indefinitely many possible results, or premise 2 is false because the columns do not cover all the possibilities. They only really cover the case when the Christian God exists and no other does and the case when the Christian God does not exist and no other does either.

- (c) Suppose that there is no problem with either premise 1 or premise 2. Then there is a problem with the implicit or hidden premise 3. According to the table, the benefit gained from believing in the case when the Christian God exists is infinitely positive and the loss from not believing in this case is infinitely negative. Using these facts and the rest in the table, we are supposed to be able to calculate that we are better off believing in the existence of the Christian God than not believing. But there is no way to make sound calculations involving infinite gains and losses. So premise 3 may be false – or at least it is very uncertain that it is true.

God is, or He is not. Reason can decide nothing here. [. . .] A game is being played at the extremity of this infinite distance where heads or tails will turn up. [. . .] Which will you choose then? [. . .] Let us weigh the gain and the loss in wagering that God is. [. . .] If you gain, you gain all; if you lose, you lose nothing. Wager, then, without hesitation that He is. (§233)

P1. The information in Table 1 is true.

P2. The information in Table 1 is complete.

C1. The information in Table 1 is true and the information in Table 1 is complete (conjunction, P1, P2).

- P3. If the information in Table 1 is true and the information in Table 1 is complete, then you are better off having the life of a believer and believing in the Christian God than not doing so.
- C2. You are better off having the life of a believer and believing in the Christian God than not doing so (*modus ponens*, C1, P3).
- P4. If you are better off having the life of a believer and believing in the Christian God than not doing so, then you logically should choose the Christian kind of life and believe in God.
- C3. You logically should choose the Christian kind of life and believe in God (*modus ponens*, C2, P4).